# Ardusa

# A Grammar of the Ardusan Languages

by Ian A. Cook

last edited April 29, 2019

#### Ardusa: A Grammar of the Ardusan Languages

by Ian A. Cook Last edited April 29, 2019.

Typeset in Junicode and Fira Sans with X<sub>7</sub>LAT<sub>2</sub>X.

Ardusa is a fictional landmass set in a fictional constructed world. All of the languages spoken on Ardusa, such as Tavonic, Alnuric, Redodhic, and others, are themselves fictional, spoken by fictional groups of people, and as such are not related to any naturally existing languages. These languages' vocabularies are entirely *a priori*, which means that no words are derived from the vocabularies of real-world languages. That being said, these languages are intended to be naturalistic, so similarities will occur. Nonetheless, any actual duplication is accidental.

- No website yet
- https://github.com/nai888/ardusa
- This document copyrighted © 2018–2019 by Ian A. Cook under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 license, © BY-NC-SA 4.0
- All languages described within this document copyrighted © 2018–2019 by Ian A. Cook, all rights reserved

# Contents

List	of Fig	ures		viii
List	of Tal	oles		ix
Abb	reviati	ons		x
Ack	nowle	dgments		xi
Pref	ace			xii
I	Tav	onic Fa	mily: Tavonic	I
I	Hist	ory and	Ethnography	2
	I.I	Brief H	listory	2
	1.2	Ethnog	graphy	3
		I.2.I	Demonyms and Language Names	3
		I.2.2	Ethnology	3
		1.2.3	Demography	3
2	Pho	nology		4
	2.I	Phonen	me Inventory	4
		2.I.I	Consonants	4
		2.1.2	Vowels	7
	2.2	Phonot	actics	7
		2.2.I	Syllable Structures	7
		2.2.2	Phonological Changes	9
		2.2.3	Syllable Parsing	9
		2.2.4	Number of Syllables per Word	9
	2.3	Prosody	y	9
		2.3.I	Syllable Weight	9
		2.3.2	Word Stress	IO

		2.3.3	Intonation	10
3	Mor	phologica	al Typology	II
	3.I	Morpho	ological Typology	II
		3.I.I	Phonological Fusion	I2
		3.1.2	Formative Exponence	13
		3.1.3	Flexivity	I4
		3.1.4	Synthesis	16
	3.2	Morpho	ological Processes	17
		3.2.I	Suffixation	17
		3.2.2	Cliticization	18
	3.3	Locus o	of Marking	21
4	Gran	nmatical	Categories	2.4
•	4.I			24
	•	4.I.I	Gender	=
		4.I.2	Number	=
		4.1.3	Case	26
5	Com	poundin	ng	27
6	Time	e and Me	easurement	28
7	Deri	vation		29
8	Synta	ax		30
9	Disc	ourse		31
Ю	Tavo	nic Refe	rence Grammar	32
II	Tavo	onic Fa	mily: Alnuric	33
			·	33
II	Histo	•	Ethnography	34
	II.I		listory	
	II.2	_	raphy	
		II.2.I	Demonyms and Language Names	
		II.2.2	Ethnology	
		II.2.3	Demography	• • 34
12	Phor	nology		35
13	Morj	phologica	al Typology	36
14	Gran	nmatical	Categories	37

15	Compounding	38			
16	Time and Measurement	39			
17	Derivation				
18	Syntax	<b>4</b> I			
19	Discourse	42			
20	Alnuric Reference Grammar	43			
III	Tavonic Family: Redodhic	45			
2.1	History and Ethnography  21.1 Brief History	46 46 46 46 46			
22	Phonology	<b>4</b> 7			
23	Morphological Typology	48			
24	Grammatical Categories	49			
25	Compounding	50			
26	Time and Measurement	51			
27	Derivation	52			
28	Syntax	53			
29	Discourse	54			
30	Redodhic Reference Grammar	55			
IV	Kalaakan Family: Kalaakan	<b>5</b> 7			
31	History and Ethnography	58			
32	Phonology	59			
33	Morphological Typology	60			

34	Grammatical Categories	61				
35	Compounding	62				
36	Time and Measurement	63				
37	Derivation					
38	Syntax					
39	Discourse					
40	Kalaakan Reference Grammar					
V	Kalaakan Family: Elvish	69				
<b>4</b> I	History and Ethnography	70				
42	Phonology	71				
43	Morphological Typology					
44	Grammatical Categories					
45	Compounding					
46	Time and Measurement					
<b>4</b> 7	Derivation					
48	Syntax	77				
49	Discourse					
50	Elvish Reference Grammar					
VI	Kalaakan Family: Dwarvish	81				
51	History and Ethnography	82				
52	Phonology	83				
53	Morphological Typology	84				
54	Grammatical Categories	85				

55	Compounding			
56	Time and Measurement	87		
<b>5</b> 7	Derivation			
58	Syntax			
59	Discourse			
60	Dwarvish Reference Grammar	91		
VII	Kalaakan Family: Orcish	93		
61	History and Ethnography	94		
62	Phonology	95		
63	Morphological Typology	96		
64	Grammatical Categories	97		
65	Compounding			
66	Time and Measurement			
67	Derivation	100		
68	Syntax	101		
69	Discourse	102		
70	Orcish Reference Grammar			
VIII	Kunmian Family: Kunmian	105		
71	History and Ethnography	106		
72	Phonology	107		
73	Morphological Typology	108		
74	Grammatical Categories	109		
75	Compounding	IIO		

76	Time and Measurement	III		
77	Derivation	112		
<b>78</b>	Syntax			
79	Discourse			
80	Kunmian Reference Grammar			
IX	Kunmian Family: Gnomish	117		
81	History and Ethnography	118		
82	Phonology	119		
83	Morphological Typology	120		
84	Grammatical Categories	121		
85	Compounding	122		
86	Time and Measurement	123		
87	Derivation	124		
88	Syntax	125		
89	Discourse	126		
90	Gnomish Reference Grammar			
X	Appendices	129		
A	Conceptual Metaphors	130		
В	Kinship	131		
C	Names	132		
D	Examples	133		
E	Vocabulary	134		
Bibli	bliography 13			

Index 138

# List of Figures

# List of Tables

2.I	Tavonic Consonant Inventory	5
2.2	Tavonic Consonant Romanization	6
2.3	Tavonic Vowel Inventory	7
4.I	Tavonic Animate Noun Declension Paradigm	25
4.2	Tavonic Inanimate Noun Declension Paradigm	25

# **Abbreviations**

тр	first person plural	IND	indicative infinitive
ірс	first person paucal	INF	
IS	first person singular	INT	interrogative
<b>2</b> p	second person plural	IPFV	imperfective
2pc	second person paucal	MED	medial
<b>2</b> S	second person singular	NEG	negative
3p	third person plural	NMZ	nominalizer
3рс	third person paucal	NPST	nonpast
3S	third person singular	PASS	passive
ABS	absolutive	PC	paucal
ACC	accusative	PFV	perfective
ACT	active	PL	plural
AN	animate	PRG	progressive
DAT	dative	PST	past
DIM	diminutive	PTCP	participle
ERG	ergative	RTSP	retrospective
GEN	genitive	SBJV	subjunctive
IMP	imperative	SG	singular
IN	inanimate	TOP	topic

ungrammatical grammatically questionable semantically odd or ill-formed

# Acknowledgments

Given that I have not taken any official linguistics coursework, this work would not be possible without several sources of linguistic education. Mark Rosenfelder's *The Language Construction Kit* and *Advanced Language Construction Kit* were important to my first starting out in the world of language construction, with further knowledge gained from David J. Peterson's *The Art of Language Invention*. Of course, I received an unmeasurable amount of education via several online sources, especially the articles available on Wikipedia. Yet more education, as well as inspiration and motivation, have come from the *Conlangery* podcast and all its hosts and guests. Lexicon generation received guidance from Mark Rosenfelder's *The Conlanger's Lexipedia* and William S. Annis' *A Conlanger's Thesaurus*.

Finally, this document's format, layout, and organization have been influenced by several sources, particularly Thomas E. Payne's *Describing Morphosyntax*, Carsten Becker's *A Grammar of Ayeri*, and Matt Pearson's *The Okuna Reference Grammar*.

## **Preface**

This document provides a detailed grammatical description of the languages of Ardusa, a fictional landmass set in a fictional constructed world. This project serves as a method for linguistic research, as an intellectual exercise, as an outlet for creative and artistic expression, and as a setting for potential future works of fiction. It is intended primarily for my own personal use and entertainment, though others with similar linguistic interests will hopefully find it interesting and entertaining as well. I have chosen to use LateX to typeset this grammar because it provides a way to be clear, consistent, and organized. Further, since LateX uses plain text files, it allows me to use Git for version control so I can keep track of changes over time.

My goal is to build a series of languages with naturalistic grammars that are linguistically plausible and consistent, yet also original in their content and details. This project consists of three distinct and unrelated language families, each of which contains one or more related languages. Some elements of these languages are influenced by existing languages such as Japanese, Finnish, Navajo, Nahuatl, and Arabic, but they are not meant to simply mimic these, instead drawing this inspiration into new forms along with entirely *a priori* lexicons. Ardusa and the Ardusan languages is an ongoing project with no fixed endpoint or goal.

This concise grammar is my attempt to document the Ardusan languages in an official and systematic way, and as comprehensively as possible. It is intended to be the official description of the languages. This is a concise grammar because, admittedly, I am not a professional linguist, nor have I taken any linguistics coursework. My education in linguistics consists solely of self-guided research, which means invariably my knowledge will be limited. It is a concise grammar because, frankly, I don't know enough to go into greater detail. That being said, I'm always eager to learn, and will always accept feedback. Again, learning is one of the reasons for this endeavor.

Since the purpose of writing this grammar is to provide a comprehensive description of the Ardusan languages, not to teach them to others, it is not intended to serve as a textbook or as a way to learn the languages. I have organized topics thematically, rather than curricularly, and I employ technical terms when they are precise, accurate, and appropriate. I have not conducted a formal analysis of the languages, but I have worked to make it as descriptive as possible.

The discussion is ordered from the smallest elements of the languages to the largest. It begins with a description of each language's place in Ardusa followed by their phonologies, it addresses morphology and the combining of words, it discusses vocabulary and derivation, and it explains syntax and discourse. The final chapter serves as a reference grammar, summarizing all of the previous chapters. There are

also several appendices describing the conceptual metaphors that organize much of the lexicons, the naming practices of the fictional speakers of these languages, several translation examples, and lexicons. Other resources include a glossary of linguistic glossing abbreviations, a bibliography, and an index.

This document uses several linguistics conventions to clarify meaning. Any reference to specific orthographic spelling is marked with angled brackets, such as  $\langle \text{hin} \rangle$ . Pronunciations are usually given phonemically, in which case they are marked with slashes, such as /hin/. Phonetic pronunciations are used only when conveying specific details like the difference between allophones, and are marked with square brackets, such as [çin]. Both phonemic and phonetic pronunciations are given using the International Phonetic Alphabet. Foreign words are always written in italics, such as lu. English glosses are surrounded by single quotes, such as 'and'. If a morphological gloss is provided in-line, it is surrounded by parentheses, such as (INF).

Many short examples are provided in one single line.

#### (I) Tavonic: šek / sek/ 'ran' (run-IND.PST.PFV)

Longer examples are usually provided with a multi-line, or interlinear, gloss. In these examples, the optional first line will indicate which language the example is in, if it is not clear from context. The next line presents the text in that language, followed by the pronunciation. After this, the text is broken into its component morphemes, and the following line provides a morpheme-by-morpheme gloss. The final line provides an English translation of the example phrase or sentence.

```
(2) Tavonic

Nan oko šeŏo.

/nan o'ko 'ʃe.ŏo/

nan= oko š-eŏo

PL.AN.TOP= dog run-IND.PST.PRG

'The dogs were running.'
```

As shown in example 2, morpheme glosses are labeled with abbreviations in SMALL CAPS. A full list of all glossing abbreviations is given on page x. A hyphen marks a morpheme boundary within a word that is shared between the text and its gloss, while a period marks a boundary present in only one or the other, including when a single word in the text corresponds to multiple words in its gloss. Clitics are marked with an equals sign, reduplication with a tilde, discontinuous affixes (e.g., infixes, circumfixes) with angle brackets, and morphemes that cannot be easily separated out with backslashes.

The LATEX source code for this grammar and a copy of this PDF are available in a public G GitHub repository. Undoubtedly, there will be errors in this document. If you notice any, please feel free to open an issue in the GitHub repository with a description and the location of the error.

Ian A. Cook Minneapolis, September 8, 2018

# Part I

Tavonic Family: Tavonic

# History and Ethnography

This chapter will present a brief history of the Tavonic language family, followed by a short description of its ethnolinguistic context.

## 1.1 Brief History

The Tavotath (the Tavonic people) migrated to Ardusa hundreds of years ago in what they termed Year I of the Ardusan Era (AE). Ardusa is far from any other landmasses and is isolated from the influence of other lands and other peoples. The Tavotath landed in the warm southeastern regions of Ardusa where they first established their new home, naming this new realm *Urdeso*, a compound word meaning 'Safe Land'. Over the following centuries, the Tavotath spread westward and northward throughout the whole of Ardusa.

As the Tavotath spread, they formed several individual territories, each of which eventually developed into small kingdoms. These kingdoms constantly battled one another for power, and borders were continually shifting. Those who fled the fighting fled northward, furthering the Tavonic expansion throughout Ardusa. As the Tavotath spread farther apart and splintered, their language diverged. Two main dialects emerged, one in the north and one in the south.

After a few hundred years, one kingdom in the south emerged as dominant, conquering or allying with more and more kingdoms until, by 327 AE, the entire south of Ardusa was united under one empire. This empire enforced the usage of the language that had emerged in the south, thus forming the Alnuric language. The empire continued to push northward until it spread too thin and reached a stalemate with the allied kingdoms in the north around 371 AE. Finally, in 582 AE after a couple hundred years of relatively stable rule, the empire declined and divided again into individual territories, leaving behind six sovereign kingdoms.

While the empire was emerging in the south, the kingdoms in the north formed a loose alliance to resist its spread. The alliance managed to reach a stalemate with the empire, stopping its spread northward. The allied kingdoms together maintained the language that emerged in the north, thus forming the Redodhic language. Eventually, as the empire split in 582 AE and the northern alliance was no longer needed, the north also split into individual territories, leaving behind four sovereign kingdoms.

## 1.2 Ethnography

#### 1.2.1 Demonyms and Language Names

The Tavotath were a tribe that migrated to Ardusa together, fleeing their previous home. The Tavonic word *tavo* /ta'vo/ means 'person', and so the derived word *Tavotaþ* /ta.vo'taθ/ means 'people' or 'tribe'. In other words, the Tavotath referred to themselves as the People, with *Tavonak* being the Language of the People. The Alnuric- and Redodhic-derived words, *Tevodeþ* /te.vo'deθ/ and *Tovujiþ* /to.vu'd͡ʒiθ/ respectively, refer to all people who descended from the original Tavotath tribe. Both Alnuric and Redodhic are Tavotath languages and part of the Tavonic language family.

### 1.2.2 Ethnology

Here will be a brief ethnological description of the Tavotath.

### 1.2.3 Demography

Here will be a brief demographical description of the Tavotath.

# Phonology

This chapter will present the inventory of consonants and vowels. An observational analysis of the Tavonic languages' syllable structures and phonotactics will follow. The chapter will close with notes on syllable stress within words and a brief exploration of intonation.

## 2.1 Phoneme Inventory

#### 2.1.1 Consonants

With approximately 20 consonants, Tavonic has an "average" inventory. Table 2.1 shows the full chart of consonant phonemes, along with several allophones enclosed in parentheses. Table 2.2 shows how each consonant in Tavonic is romanized.

Despite its "average" inventory of consonants, there are many more allophones that occur in the language. First, any doubled consonant is realized as a geminated (elongated) consonant.

#### (I) unner /un:er/ 'empire'

Thus, example 1 above is realized with a lengthened [n]. A doubled  $\langle r \rangle$  is similarly geminated, but the pronunciation changes from a flap/tap to a trill.

The remaining allophones occur due to various sound change processes, mostly by assimilation. For example, /n/ becomes velarized when it appears immediately before a velar consonant.

#### (2) tavonga [ta.voŋ'ga] 'humanlike'

As discussed above,  $\langle r \rangle$  can be pronounced as both a tap/flap [r] and as a trill [r]. Additionally, when part of certain consonant clusters, it can be pronounced as an approximant [1]. This primarily occurs when the  $\langle r \rangle$  leads into a cluster or immediately follows a nasal.

#### (3) frorgali [fros. ga.li] 'to un-see'

<sup>&</sup>lt;sup>1</sup>Ian Maddieson, "Consonant Inventories," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/1.

Table 2.1: Tavonic Phonetic Consonant Inventory (allophones in parentheses)

Consonants	Bilabial	Labio-dental	De	Dental	Alveolar	olar	Post-a	Post-alveolar	Velar	ar
Nasal	ш					u				(ŋ)
Plosive		d d	t	р					k	ы
Fricative		v f	θ	&	S	Z	J	3	X	Å
Flap/Tap						J				
Trill						(r)				
Approximant						(r)				
Lateral						1				

Table 2.2: Tavonic Consonant Romanization

Phone	Phoneme	Romanization	English	Notes
[m]	/m/	$\langle m \rangle$	$\langle m \rangle$	
[n]	/n/	$\langle n \rangle$	$\langle n \rangle$	
[ŋ]	/n/	$\langle n \rangle$	$\langle n \rangle$	/n/ becomes velarized before a velar consonant
[p]	/p/	$\langle p \rangle$	$\langle p \rangle$	
[b]	/b/	$\langle b \rangle$	$\langle b \rangle$	
[t]	/t/	$\langle { m t}  angle$	$\langle t \rangle$	
[d]	/d/	$\langle \mathrm{d} \rangle$	$\langle d \rangle$	
[k]	/k/	$\langle \mathrm{k}  angle$	$\langle k \rangle$	
[g]	/g/	⟨g⟩	⟨g⟩	
[f]	/f/	$\langle f \rangle$	⟨f⟩	
[v]	/v/	⟨v⟩	\langle v \rangle	
$[\theta]$	/θ/	$\langle b \rangle$	⟨th⟩	
[გ]	/ŏ/	$\langle \delta \rangle$	⟨dh⟩	
[s]	/s/	⟨s⟩	⟨s⟩	
[z]	/z/	⟨z⟩	⟨z⟩	
	/ʃ/	⟨š⟩	⟨sh⟩	
[3]	/3/	⟨ž⟩	⟨zh⟩	
[x]	/x/	$\langle \check{\mathbf{k}}  angle$	⟨kh⟩	
[ɣ]	/γ/	⟨ğ⟩	$\langle gh \rangle$	
[t]	/r/	⟨r⟩	⟨r⟩	
[r]	/r/	⟨rr⟩	⟨rr⟩	$\langle r \rangle$ is trilled when doubled
[1]	/r/	$\langle r \rangle$	⟨r⟩	$\langle r \rangle$ is occasionally pronounced as an approximant when a part of a consonant cluster
[1]	/1/	<b>(1)</b>	<b>(1)</b>	

Table 2.3: Tavonic Vowel Inventory



#### 2.1.2 Vowels

Tavonic distinguishes five vowel qualities, as shown in Table 2.3, giving it an "average" inventory.<sup>2</sup> This means the consonant—vowel ratio is 20:5 or 4.0, which is "average".<sup>3</sup> Tavonic does not distinguish long and short vowels and does not allow any diphthongs.

Note that all Tavonic vowels have a very rigid acceptable pronunciation with very little variance.

- (4) a. *akrinsali* 'to rewrite' is pronounced /ak.rin'sa.li/. (i) is not pronounced with a lax [1] in closed syllables (i.e., /ak.rɪn'sa.li/)
  - b. eŏerik 'pencil' is pronounced /e.ŏe'rik/. ⟨e⟩ is not pronounced with an open [ε] in closed syllables or syllables with secondary stress or with a central [ə] in unaccented syllables (i.e., /ε.ŏə'rik/), nor is it diphthongized to [eɪ̯] (i.e., /eɪ̯-ŏe'rik/)
  - c.  $\check{k}alo$  'man' is pronounced /xa'lo/.  $\langle a \rangle$  is not pronounced with a raised [ $\alpha$ ] (i.e., /x $\alpha$ 'lo/), a backed [ $\alpha$ ] (i.e., /x $\alpha$ 'lo/), or a centralized [ $\alpha$ ] (i.e., /x $\alpha$ 'lo/)
  - d. *esondi* 'arable' is pronounced /e.son'di/. (o) is not pronounced with an open [ɔ] (i.e., [e.sɔn'di]), nor is it diphthongized to [ou] (i.e., /e.soun'di/)
  - e. *frumbali* 'to misunderstand' is pronounced /frum'ba.li/. ⟨u⟩ is not pronounced with an open [ʌ] (i.e., /frʌm'ba.li/) or a centralized [ʊ] (i.e., /frʊm'ba.li/)

### 2.2 Phonotactics

At the time of writing, there does not yet exist a sufficient corpus for a meaningful statistical analysis of Tavonic's phonotactics. Therefore, this section will present only a cursory observational analysis.

### 2.2.1 Syllable Structures

Syllables in Tavonic must contain a vowel to serve as the syllable's nucleus. Each syllable will only have at most one vowel. Syllables may also include any single consonant or one of a limited set of

<sup>&</sup>lt;sup>2</sup>Ian Maddieson, "Vowel Quality Inventories," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/2.

<sup>&</sup>lt;sup>3</sup>Ian Maddieson, "Consonant-Vowel Ratio," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/3.

two-consonant clusters as the onset, coda, or both.

In other words, the most complex syllable structure allowed in Tavonic is CCVCC, with restrictions on the allowable consonant clusters, giving Tavonic a "moderately complex syllable structure".4

#### ٧

Since vowels are required to form a syllable nucleus, the most basic syllable structure is simply a vowel (V). Any syllable that starts with a vowel will occur exclusively at the beginning of a word.

- (5) a. e/e/ 'in' or 'on'
  - b. eðer /e'ðer/ 'pen'
  - c. abom /a'bom/ 'two'
  - d. oko /o'ko/ 'dog'
  - e. usukon /u.su'kon/ 'possessor'
  - f. ablu /ab'lu/ 'cat'

#### C

A syllable can contain a single-consonant onset or coda. There is no restriction on which consonants may appear in the onset or coda with just one consonant. CV is likely the most frequent type of syllable in Tavonic, with CVC probably being the second-most-frequent syllable type.

- (6) a. ga/ga/'but'
  - b. lu/lu/'and'
  - c. mo/mo/'with'
  - d. kalo /xa'lo/ 'man'
  - e. šeðo /ˈse.ŏo/ (run.PST.IND.PRG) 'was running'
  - f. urda /ur'da/ 'safe'
  - g. akradir /ak.ra'dir/ 'writing implement'
  - h. esonak /e.so'nak/ 'citizen'

Across two syllables within a word, there are restrictions on the combination of consonants that are possible. At such syllable boundaries, a plosive<sup>5</sup> or a fricative<sup>6</sup> can be followed by a liquid<sup>7</sup>; a liquid may be followed by a plosive, fricative, nasal<sup>8</sup>, or a different liquid; or a nasal can be followed by any other consonant.

<sup>&</sup>lt;sup>4</sup>Ian Maddieson, "Syllable Structure," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/12.

<sup>&</sup>lt;sup>5</sup>i.e.,  $\langle p \rangle$ ,  $\langle t \rangle$ ,  $\langle k \rangle$ ,  $\langle b \rangle$ ,  $\langle d \rangle$ , or  $\langle g \rangle$ 

<sup>&</sup>lt;sup>6</sup>i.e.,  $\langle f \rangle$ ,  $\langle b \rangle$ ,  $\langle s \rangle$ ,  $\langle \dot{s} \rangle$ ,  $\langle \dot{k} \rangle$ ,  $\langle v \rangle$ ,  $\langle \delta \rangle$ ,  $\langle z \rangle$ ,  $\langle \dot{z} \rangle$ , or  $\langle \dot{g} \rangle$ 

<sup>&</sup>lt;sup>7</sup>i.e.,  $\langle l \rangle$  or  $\langle r \rangle$ 

 $<sup>^8</sup>i.e.,\,\langle m\rangle$  or  $\langle n\rangle$ 

- (7) a. elbi /el'bi/ 'egg'
  - b. ongo /on'go/ 'pan'
  - c. kalven /xal'ven/ '400'
  - d. ablunga /ab.lun'ga/ 'catlike'

#### CC

Syllables may contain onsets or codas with two consonants, but these shapes are less common and there are restrictions on the possible combinations. Syllable onsets with two consonants may only occur at the beginning of a word and may only contain a plosive or fricative followed by a liquid. Syllable codas with two consonants may only occur at the end of a word and may only contain a liquid followed by a plosive.

- (8) a. pral/pral/'some'
  - b. tlopendi /tlo.θen'di/ 'permittable'
  - c. frandi /fran'di/ 'visible'
  - d. *šolk* /folk/ 'yet'
  - e. delš /delʃ/ 'zero'

## 2.2.2 Phonological Changes

Placeholder

### 2.2.3 Syllable Parsing

Placeholder

### 2.2.4 Number of Syllables per Word

Placeholder

## 2.3 Prosody

Placeholder

## 2.3.1 Syllable Weight

Placeholder

## 2.3.2 Word Stress

Placeholder

## 2.3.3 Intonation

Placeholder

# Morphological Typology

Now that Tavonic, Alnuric, and Redodhic's phonologies have been defined in chapter 2, this chapter will discuss the next larger unit of language: morphemes. A morpheme is the smallest meaningful unit in a language. A morpheme can be a root, or it can be another element that affects or modifies the meaning of a root. Further, a morpheme may be freestanding, or it may be bound to other morphemes to form a larger word.

The discussion will begin with a general explanation of the Tavonic family's morphological typology. Following this will be a brief summary of the various morphological processes that occur in the languages, ending with an explanation of the locus of marking.

## 3.1 Morphological Typology

Traditional research would show that Tavonic is typologically partially isolating and partially fusional, meaning that morphemes are often either separated into distinct words or fused together such that a single phonological unit represents several morphemes. However, according to Bickel and Nichols,

Recent research has shown that such a scale [ranging from isolating to agglutinative to fusional to introflexive] conflates many different typological variables and incorrectly assumes that these parameters covary universally. Three prominent variables involved in this are phonological fusion, formative exponence, and flexivity (i.e. allomorphy, inflectional classes).<sup>2</sup>

Therefore, we will examine each of these areas—phonological fusion, formative exponence, and flexivity, as well as the degree of synthesis—separately.

<sup>&</sup>lt;sup>1</sup>Frans Plank, "Split Morphology: how Agglutination and Flexion Mix," *Linguistic Typology* 3 (1999): 279–340; Balthasar Bickel and Johanna Nichols, "Inflectional Morphology," in *Language Typology and Syntactic Description*, ed. Timothy Shopen, 2nd edition (Cambridge: Cambridge University Press, 2005).

<sup>&</sup>lt;sup>2</sup>Balthasar Bickel and Johanna Nichols, "Fusion of Selected Inflectional Formatives," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/20.

### 3.1.1 Phonological Fusion

Tavonic's phonological formatives are partially fusional, being partially "isolating" and partially "concatenative".<sup>3</sup> The concatenative morphemes are phonologically bound, requiring a "host word" with which they form one single phonological word, while the isolating morphemes are "full-fledged phonological words of their own".

Verbs are almost exclusively concatenative, with tense, aspect, and mood morphemes attached directly to the verb's stem.

```
(I) a. ufuli
/u'fu.li/

uf-uli
sing-INF

'to sing'
b. Ufunte!
/u'fun.te/

uf-unte
sing-IMP

'Sing!'
c. Mon ufuk.
/'mon u'fuk/
mon uf-uk
IS.TOP sing-IND.PST.PFV
'I sang.'
```

Example 1 shows how morphemes are attached to the stem of a verb through suffixes, rather than with separate (isolating) modifying words or nonlinear ablaut or tone modifications.

Example 1c similarly shows how personal pronouns are fusional. Example 2 demonstrates further how each personal pronoun simultaneously indicates the person, number, animacy in the third person, case, and whether it is the topic.

```
    (2) a. mor /mor/ 'I' (1s.ABS)
    b. peton /θe'ton/ 'you' (2p.ACC)
    c. ginsek /gin'sek/ 'to it' (3pc.IN.TOP.DAT)
```

This concatenation appears not only in inflectional morphology, but also in derivational morphology. For example, the word *ablutik* /a.bluˈtik/ 'kitten' is formed from the root noun *ablu* /aˈblu/ 'cat' with a diminutive suffix attached (*ablu-DIM*). Similarly, the word *akradir* /ak.raˈdir/ 'pen' is formed from the root verb *akrali* /akˈra.li/ 'to write' with a nominalizing suffix (*akra-NMZ*).

<sup>&</sup>lt;sup>3</sup>Bickel and Nichols, "Fusion of Selected Inflectional Formatives."

Nouns, on the other hand, are exclusively isolating. All grammatical markings, including number, gender, case, and topicality, are indicated using phonologically separate prepositions.

No akrakon aruþ. /no ak.raˈkon aˈruθ/ akrakon ar-ub AN.SG.TOP.ABS= writer stand-IND.NPST.PRG 'The writer is standing.' b. Eson mohes elbi šus ken botra draš. /eˈson moˌθes elˈbi ˈʃus ken botˈra ˈdraʃ/ Ø= mobes= elbi šus ken= botra dr-aš eson AN.SG.ABS= farmer IN.PC.TOP.ACC= egg 3s.AN.GEN AN.PL.DAT= wife give-IND.NPST.RTSP 'The farmer has given the eggs to his wife.'

Notice in example 3 how every noun is preceded by a preposition that identifies that noun's grammatical role within the sentence.

### 3.1.2 Formative Exponence

Tavonic has mostly polyexponential formatives, meaning that, in almost all cases, single morphemes express multiple grammatical categories each.<sup>4</sup> Derivational morphemes are all monoexponential while inflectional morphemes are almost exclusively polyexponential.

```
(4) Nan tavotik one vi?
/nan ta.vo'tik o'ne vi/

nan= tavo-tik on-e =vi
AN.PL.TOP= person-DIM play-IND.NPST.IPFV =INT
'Do children play?'
```

Example 4 includes one derivational morpheme and three inflectional morphemes attached to the roots *tavo* and *oneli*, two of which are polyexponential. The preposition *nan* is a polyexponential morpheme that identifies the preceding noun's gender (animate), number (plural), and topicality. The affix *-tik*, a diminutive that derives the word 'child' from the root 'person', is a monoexponential derivational suffix. The single-letter suffix *-e* attaches to the verb to express the mood (indicative), tense (nonpast), and aspect (imperfective). Finally, the word *vi* is a monoexponential interrogative clitic that turns the sentence into a question.

Noun prepositions can additionally encode case. In example 4, the noun *tavotik* is inferred to be in the absolutive case despite being unmarked for it. In many other situations, this grammatical case

<sup>&</sup>lt;sup>4</sup>Balthasar Bickel and Johanna Nichols, "Exponence of Selected Inflectional Formatives," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/21.

is additionally encoded within the same polyexponential preposition. In example 3b, the word *mohes* indicates that the noun 'egg' is inanimate, paucal, the topic, and in the accusative case.

One noun preposition, *nut* has not fully cumulated, with the noun's number being still separated into a distinct segment.

```
(5) a. nut-\varnothing /nut/ (AN.TOP.ACC-SG)
b. nut-os /nu'tos/ (AN.TOP.ACC-PC)
c. nut-on /nu'ton/ (AN.TOP.ACC-PL)
```

All other noun prepositions are fully cumulated and cannot be separated into their component morphemes.

```
(6) a. Inanimate Ergative

i. δα /δα/ (IN.SG.ERG)
ii. δes /δes/ (IN.PC.ERG)
iii. dun /dun/ (IN.PL.ERG)

b. Inanimate Topic Dative

i. mok /mox/ (IN.SG.TOP.DAT)
ii. mekos /meˈkos/ (IN.PC.TOP.DAT)
iii. nikun /ni ˈkun/ (IN.PL.TOP.DAT)
```

### 3.1.3 Flexivity

Tavonic nouns, adjectives, and verbs display flexivity, which means that these words are divided into separate classes that receive distinct inflectional allomorphs. On such allomorphs, otherwise identical morphemes take distinct phonological shapes.

Nouns are divided into animate and inanimate genders. These two genders determine which prepositions are used to provide the grammatical context of the noun.

```
(7) a. ri bilt
/ri 'bilt/

ri= bilt
AN.PC.ABS= breath
'breaths'
b. l'eðer
/le'ðer/
le=eðer
IN.PC.ABS=pen
'pens'
```

In example 7, both *bilt* and *eder* are marked for the paucal number and the absolutive case, but because *bilt* is animate and *eder* is inanimate, the shape of the prepositions are entirely different.

Although they are distinct, the shapes are often more closely related than in example 7. Example 8 shows the animate and inanimate forms of the plural ergative preposition; the relation between the two forms is much clearer, as only the vowel changes.

```
(8) a. din bilt
/din 'bilt/

din= bilt
AN.PL.ERG= breath
'breaths'
b. dun eðer
/dun e'ðer/
dun= eðer
IN.PL.ERG= pen
'pens'
```

Nouns do not show possessive flexivity, as there is no possessive classification.<sup>5</sup> There is only one method of forming a possessive relationship: using the genitive case.

Adjectives also show flexivity since they decline to match the gender of the noun they modify. Each adjective has a distinct animate and inanimate form, with animate adjectives ending in -a, -i, or -u and inanimate adjectives ending in -e or -o.

```
(9) a. su frandi bilt
/su fran'di 'bilt/

su= frandi bilt
AN.SG.GEN= visible.AN breath
'of the visible breath'

b. šo frando eŏer
/ʃo fran'do e'ŏer/

šo= frando eŏer
IN.SG.GEN= visible.IN pen
'of the visible pen'
```

In example 9, the form of *frandi* changes depending on whether it is modifying an animate noun like *bilt* or an inanimate noun like *eðer*.

<sup>&</sup>lt;sup>5</sup>Johanna Nichols and Balthasar Bickel, "Possessive Classification," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/59.

Verbs are divided into three distinct conjugation classes, each identified by the infinitive form. Class I verb infinitives end in -ali, class II verb infinitives end in -eli, and class III verb infinitives end in -uli.

- (10) a. Class I: *bruḥat-ali* /bru.θaˈta.li/ 'to handle' (handle-INF)
  - b. Class II: š-eli /ˈʃe.li/ 'to run' (run-INF)
  - c. Class III: teg-uli /teˈgu.li/ 'to worry' (worry-INF)

Beyond just the form of the infinitive, the verb's class determines the entire conjugation paradigm for that verb.

- (II) a. Class I: bruhat-abe /bru.θa'ta.be/ 'handling' (handle-ACT.PTCP)
  - b. Class II: š-iba/'fi.ba/ 'running' (run-ACT.PTCP)
  - c. Class III: teg-ube /te'gu.be/ 'worrying' (worry-ACT.PTCP)

As shown in example 11, the same inflection takes a different form when attached to a verb of a different class. To form the active participle, *bruḥatali* becomes *bruḥatabe* and *teguli* becomes *tegube*. Following this pattern, one might expect *šeli* to become \**šebe*, but instead it becomes *šiba*.

### 3.1.4 Synthesis

As discussed in subsection 3.1.1, derivation and verb inflection occurs by attaching affixes to a stem or root, forming singular phonological words. Meanwhile, noun declension occurs using prepositions that mark the grammatical information for the noun. These prepositions are separate phonological words from the nouns themselves.

In all cases, however, inflected forms constitute singular *syntactic* words because the inflections cannot be separated or reordered at all. This means that Tavonic morphology is synthetic.<sup>6</sup>

Tavonic verbs normally inflect to show mood, tense, and aspect, a total of three morpheme categories per word. The maximally inflected form adds negation, a particle that is a separate phonological word but remains a part of the syntactic word of the verb, bringing Tavonic's category-per-word ratio up to 4.7

```
(12) Šun onek bo.
/'ʃun o'nek bo/

šun on-ek -bo
3s.AN.TOP play-IND.PST.PFV -NEG
'S/he did not play.'
```

<sup>&</sup>lt;sup>6</sup>Balthasar Bickel and Johanna Nichols, "Inflectional Synthesis of the Verb," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/22.

<sup>7</sup>Ibid.

## 3.2 Morphological Processes

Tavonic is "predominantly suffixing" and primarily makes use of suffixes and clitics to derive and inflect words. The language does not employ infixation, stem modification, or suprafixation, no prefixation has yet been identified, and reduplication only appears in wordplay and child-directed speech.

#### 3.2.1 Suffixation

mi

'Erase that.'

þro

IN.SG.TOP that.MED erase-IMP

Suffixes in Tavonic apply mainly to verbs. All verbal inflections occur via the addition of suffixes, whether phonologically bound or not. This is illustrated in example 13.

```
(13) a.
         Šona git akraž.
          /so'na git ak'ray/
                      git
                                akr-ağ
          3p.AN.TOP 3s.IN.ACC write-IND.PST.RTSP
          'They had written it.'
          Monsa ufut oh nikis.
          /mon'sa u'fut o\theta ni'kis/
                                       ob nik-is
          monsa uf-ut
          IPC.TOP sing-IND.NPST.PFV if be.able-sBJV.NPST.IPFV
          'We will sing if we are able.'
          usombe akrapis
          /u'som.be ak.ra'pis/
          us-ombe
                              akrapis
          hold-pass.ptcp.in letter
          'held letter'
      d. Mi pro akrorganta.
          /mi 'θro ak.ror'gan.ta/
```

akrorg-anta

<sup>\*</sup>Matthew S. Dryer, "Prefixing vs. Suffixing in Inflectional Morphology," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/26.

e. Mana kantenta bo.
/ma'na kan'ten.ta bo/
mana kant-enta -bo

Ip.TOP thank-IMP -NEG

'Don't thank us.'

As discussed in subsection 3.1.4, although the particle *bo* is a separate phonological word, it functions syntactically as a suffix. This is shown in example 13e where it attaches to the verb *kantenta* to negate it.

Suffixes are also present on adjectives, though only minimally. Adjectives take one of two vowel endings to mark the gender of its referent, with animate adjectives ending in -i, -a, or u and inanimate adjectives ending in -e or -o.

- (14) a. ablunga /ab.lun'ga/ (AN) vs. ablunge /ab.lun'ge/ (IN) 'catlike'
  - b. akrandi /ak.ran'di/ (AN) vs. akrando /ak.ran'do/ (IN) 'writable'
  - c. bruḥatla /bru.θat'la/ (AN) vs. bruḥatlo /bru.θat'lo/ (IN) 'manual'
  - d. fraþru /fraθ'ru/ (AN) vs. fraþro /fraθ'ro/ (IN) 'observant'

Suffixation also occurs regularly in derivational inflection. In fact, several derivational suffixes can be strung together to derive yet more words. Example 15 shows this process.

- (15) a. frali / fra.li/ 'to see'
  - b. fravem /fra'vem/ 'sight'
  - c. fravemitla -o /fra.vem.it'la/ 'visual'
  - d. onaš /o'nas/ 'rug'
  - e. onašuli /o.naˈʃu.li/ 'to place'
  - f. onašinsuli /o.na.ſin'su.li/ 'to re-place'

In example 15f, the -ins affix may not immediately appear to be a suffix, however it should be noted that it is being attached to the end of the stem of the word, which is onaš-, prior to the verb's infinitive ending -uli, which is an inflectional suffix.

#### 3.2.2 Cliticization

Clitics can be difficult to define in a formal way, and it is therefore worthwhile to explain how certain morphemes in Tavonic can be classified as such.

A 'clitic' is often characterized as "a 'small', prosodically weak, or non-prominent word which fails to respect normal principles of syntactic distribution because it requires a host to which it can attach phonologically". Clitics are different from affixes in that they will typically "cliticize 'promiscuously'

<sup>9</sup>Andrew Spencer and Ana Luís, "The Canonical Clitic," chap. 6 in *Canonical Morphology and Syntax*, by Dunstan Brown, Marina Chumakina, and Greville G. Corbett (2012), 123–150, ISBN: 9780199604326, accessed November 25, 2018,

to a word of any old category, including uninflectable words which otherwise fail to take any affixes whatever", <sup>10</sup> whereas affixes are limited to only specific parts of speech to which they can connect. <sup>11</sup> Yet, they are different from function words in that they are bound, that is they do not have the free ordering afforded to words. <sup>12</sup>

The primary example of clitics in Tavonic is the noun prepositions. These particles cannot appear alone, conveying solely grammatical, not lexical, information. They are not affixes because they attach to the beginning of the entire noun phrase, no matter what word comes after, rather than attaching directly to the head noun.

(16) a. Mod nas oko fra. /'mod nas o'ko 'fra/

mod nas= oko fr-a
IS.ERG AN.PC.TOP dog see-IND.NPST.IPFV

'I see the dogs.'

b. *Mod nas urda oko fra.*/'mod nas ur'da o'ko 'fra/

mod nas= urd-a oko fr-a
IS.ERG AN.PC.TOP protected-AN dog see-IND.NPST.IPFV

'I see the protected dogs.'

c. Mod nas tesar urda oko fra. /'mod nas te'sar ur'da o'ko 'fra/

mod nas= tesar urd-a oko fr-a
IS.ERG AN.PC.TOP 2pc.GEN protected-AN dog see-IND.NPST.IPFV

'I see your protected dogs.'

d. Mod nas su eson urda oko fra.
/'mod nas su e'son ur'da o'ko 'fra/

mod nas= su= eson urd-a oko fr-a is.erg an.pc.top an.sg.gen farmer protected-an dog see-ind.npst.ipfv

'I see the farmer's protected dogs.'

Notice in example 16 how the particle *nas* directly precedes the entire noun phrase, even when separated from the head noun by an adjective (16b), a pronoun (16c), and even another modifying noun and its preposition (16d).

doi:10.1093/acprof:0s0/9780199604326.001.0001, https://www.academia.edu/4379177/The\_canonical\_clitic\_With\_Ana\_Lu%C3%ADs\_.

<sup>10</sup> Ibid.

<sup>&</sup>lt;sup>11</sup>Arnold M. Zwicky and Geoffrey K. Pullum, "Cliticization vs. Inflection: English N'T," *Language* 59, no. 3 (1983): 503–505, accessed November 25, 2018, https://web.stanford.edu/-zwicky/ZPCliticsInfl.pdf.

<sup>&</sup>lt;sup>12</sup>Arnold M. Zwicky, "Clitics and Particles," *Language* 61, no. 2 (1985): 286–290, accessed November 25, 2018, http://babel.ucsc.edu/-hank/mrg.readings/zwicky1985.pdf.

In some cases, the noun prepositions reduce phonologically and attach to the following word. Any time a noun preposition ends with the same vowel with which the following word begins, that vowel is dropped and the preposition is attached orthographically to the following word with an apostrophe.

- (17) a.  $le\ e\delta er \rightarrow l'e\delta er / le'\delta er / pens'$  (IN.PC.ABS-pen)
  - b. *mati inam* → *mat'inam* /ma.ti'nam/ 'location' (IN.SG.TOP.ACC-location)
  - c.  $no\ oko \rightarrow n'oko / no'ko / 'dog' (AN.SG.TOP-pen)$
  - d.  $su\ urda\ ablu \rightarrow s'urda\ ablu\ /sur'da\ ab'lu/ 'of the protected cat' (AN.SG.GEN-protected-AN cat)$

This phonological reduction occurs no matter whether the following word is the noun the preposition is modifying or not. For example, notice in example 17d that the preposition attaches itself to *urda* even though it is an adjective modifying the noun *ablu*.

The other main example of cliticization is the particle *vi*. It is used to ask questions and is most often added at the end of a sentence after the verb, as shown in example 18.

(18) No šekon tu fraþru oko usu vi? /no ſe'kon tu fraθ'ru o'ko u'su vi/

```
no= šekon tu= fraþr-u oko us-u =vi
AN.SG.TOP= runner AN.SG.ACC= observant-AN dog have-IND.NPST.IPFV =INT
```

'Does the runner have an observant dog?'

A speaker can, however, move the interrogative particle earlier in the sentence to focus the question on some specific element.

(19) a. No šekon vi tu fraþru oko usu? /no ∫e'kon vi tu fraθ'ru o'ko u'su/

```
no= šekon =vi tu= fraþr-u oko us-u
AN.SG.TOP= runner =INT AN.SG.ACC= observant-AN dog have-IND.NPST.IPFV
```

'Is it the runner who has an observant dog?'

b. No šekon tu fraþru vi oko usu? /no ſe'kon tu fraθ'ru vi o'ko u'su/

```
no= šekon tu= fraþr-u =vi oko us-u
AN.SG.TOP= runner AN.SG.ACC= observant-AN =INT dog have-IND.NPST.IPFV
```

'Is it an observant dog the runner has?'

c. No šekon tu fraþru oko vi usu?/no ſe'kon tu fraθ'ru o'ko vi u'su/

```
no= sekon tu= frapr-u oko=vi us-u An.sg.top= runner An.sg.acc= observant-an dog=Int have-ind.npst.ipfv
```

'Is it an observant dog the runner has?'

#### 3.3 Locus of Marking

Tavonic is almost exclusively dependent-marking.<sup>13</sup> This can readily be seen in the expression of possessive relationships, where the dependent is marked with the genitive case.

- (20) a. tes botra
  /'tes bot'ra/

  tes botra
  2s.GEN wife

  'your wife'
  - b. su esobiš botra
    /su e.so'biʃ bot'ra/

    su= esobiš botra

    AN.SG.GEN= patriot wife

    'the patriot's wife'





In example 20a, 'you' are grammatically in possession of *botra* 'wife'; the possessee forms the head of the phrase while it is modified by the possessor, which receives the genitive inflection. In example 20b, *botra* is still the possessee and thus the head of the phrase while the genitive is marked on the dependent, *esobiš* 'patriot', using a noun preposition.

Tavonic also shows dependent marking when modifying nouns with adjectives.



In example 21, while the head noun *botra* is marked for animacy with *ran*, the dependent modifying adjective *k̃alonža* 'husbandless' takes the *-a* animate ending to match.

<sup>&</sup>lt;sup>13</sup>Johanna Nichols and Balthasar Bickel, "Locus of Marking: Whole-language Typology," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/25.

At the clause level, Tavonic is solely dependent-marking. Verbs have no grammatical inflections that indicate the grammatical role of any noun phrases within the clause, with that information being marked only on the verb's dependents, the noun phrases.

(22) a. Mon usuš.
/'mon u'suʃ/

mon us-uš

IS.TOP sing-IND.NPST.RTSP

'I have sung.'

'I thank you.'



b. Mon þet kante.
/'mon 'θet kan'te/
mon þet kant-e
IS.TOP 2S.ACC thank-IND.NPST.IMP



c. Nas arb usuš.

/nas 'arb u'suʃ/

nas= arb us-uš

AN.PC.TOP= bird sing-IND.NPST.RTSP

'The birds have sung.'



d. Do su botra kalo mi tavofre alma frak. /do su bot'ra xa'lo mi ta.vof're al'ma 'frak/

do= su= botra kalo mi= tavofr-e alma fr-ak
AN.SG.ERG= AN.SG.GEN= woman husband IN.SG.TOP= inhabited-IN house see-IND.PST.PFV

'The woman's husband saw the inhabited house.'



In example 22a, the pronoun *mon* is declined to indicate it is the topic of the sentence while the verb *usuš*, despite conjugating for mood, tense, and aspect, is not marked for this role. Example 22b similarly marks the two pronouns *mon* and *þet* for their roles in the sentence as topic and object while the verb *kante* does not inflect to indicate these roles. When nouns are used instead of pronouns, as in examples 22c–d, the nouns are marked for their grammatical role by their prepositions, their own dependents, while the head verb remains unmarked for these roles.

#### **Grammatical Categories**

Tavonic words can be divided into several different categories, or parts of speech. While the previous chapter dealt with the general mechanisms of marking words, this chapter will examine each of the various parts of speech in order to define their morphology more closely. The discussion will begin with an examination of nouns, pronouns, and verbs. Following this will be a discussion of the remaining parts of speech, including adverbs, numerals, and conjunctions.

#### 4.1 Nouns

Nouns in Tavonic decline to express number and gender (animacy) and are marked for case to indicate their grammatical role within the clause. As discussed in chapter 3, this inflection takes place not directly on the noun itself but on prepositional clitics that convey this grammatical meaning. For a full illustration of the declension paradigms, compare Table 4.1 and Table 4.2. As shown in these tables, Tavonic noun inflections are never syncretic.<sup>1</sup>

#### 4.1.1 Gender

Grammatical gender in Tavonic consists of two² non-sex-based³ classes based primarily on semantic ontological properties.⁴ The animate gender refers primarily to entities that are considered alive or are associated with life, movement, change, or dynamism. The inanimate gender refers primarily to entities that are not alive and are generally stationary or abstract. Grammatical gender in Tavonic can

<sup>&</sup>lt;sup>1</sup>Matthew Baerman and Dunstan Brown, "Case Syncretism," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/28.

<sup>&</sup>lt;sup>2</sup>Greville G. Corbett, "Number of Genders," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), http://wals.info/chapter/30.

<sup>&</sup>lt;sup>3</sup>Greville G. Corbett, "Sex-based and Non-sex-based Gender Systems," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), https://wals.info/chapter/31.

<sup>&</sup>lt;sup>4</sup>Greville G. Corbett, "Systems of Gender Assignment," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), https://wals.info/chapter/32.

	SG	PC	PL
ABS	bruþa	ri bruþa	ran bruþa
ERG	do bruþa	das bruþa	din bruþa
ACC	tu bruþa	tos bruþa	ton bruþa
DAT	ke bruþa	kas bruþa	ken bruþa
GEN	su bruþa	sar bruþa	san bruþa
ТОР	no bruþa	nas bruþa	nan bruþa
TOP.ACC	nut bruþa	nutos bruþa	nuton bruþa
TOP.DAT	nek bruþa	nekas bruþa	naken bruþa
TOP.GEN	nus bruba	nosar bruba	nosan bruba

Table 4.1: Tavonic Animate Noun Declension Paradigm for the word bruha 'hand' or 'tool'

Table 4.2: Tavonic Inanimate Noun Declension Paradigm for the word šem 'busyness'

	SG	PC	PL
ABS	šem	le šem	ren šem
ERG	ða šem	ðes šem	dun šem
ACC	ti šem	þis šem	ten šem
DAT	ko šem	kos šem	ǩun šeт
GEN	šo šem	se šem	šen šem
TOP	mi šem	mes šem	nun šem
TOP.ACC	mati šem	moþes šem	noten šem
TOP.DAT	mok šem	mekos šem	nikun šem
TOP.GEN	miš šem	mise šem	nušen šem

also be referred to as "animacy" since that is what the genders denote. Examples of nouns in each gender can be seen in example 1.

### (1) a. Animate nouns: botra 'woman', kalo 'man', eson 'farmer', okotik 'puppy', urdatil 'ward', bilt 'breath'

b. Inanimate nouns: esotik 'country', dedu 'sky', elbi 'egg', usudir 'basket', akrapis 'letter', fradir 'glasses'

Since the nouns themselves are not directly inflected, with grammatical information instead shown on prepositional particles, it is impossible to tell what gender a noun is based solely on its word form.

Some nouns are able to change category in certain circumstances. For example, plants and animals switch from the animate gender to the inanimate gender when they serve as food. Further, there exist some duplicates with otherwise identical words declining to opposite genders.

#### 4.1.2 Number

Grammatical number in Tavonic consists of three numbers, all of which are coded on the noun prepositions.<sup>5</sup> The singular is always used when there is only one of the referent noun, the paucal is used when there are two to five of the referent noun, and the plural is used when there are more than five of the referent noun.

- (2) a. su ima /su i'ma/ 'of mother' (SG.AN.GEN= mother)
  - b. sar ima /sar i'ma/ 'of (some) mothers' (PC.AN.GEN= mother)
  - c. san ima /san i'ma/ 'of (several) mothers' (PL.AN.GEN= mother)

When a numeral is used to identify the number of a referent noun, the singular is used instead of the paucal or plural, even if without the numeral the other forms would be used.<sup>6</sup>

- (3) a.  $k'eb ima / ke\theta i'ma / to one mother' (sg.An.dat=one mother)$ 
  - b. ke arsi ima /ke ar'si i'ma/ 'to three mothers' (sg.An.dat= three mother), not \*kas arsi ima
  - c. *ke bruð abom ima* /ke bruð a'bom i'ma/ 'to seven mothers' (SG.AN.DAT= five two mother), not \*ken bruð abom ima

People's names can also be declined to the paucal or plural number to indicate the associative plural.<sup>7</sup> This form is used to refer to a person and the other people associated with that person. For example, *ri Bol* /ri bol/ (PC.AN.ABS Bol) refers to Bol and two to five other people associated with him. Similarly, *ran Ote* /ran o'te/ (PL.AN.ABS Ote) refers to Ote and the group he is with.

#### 4.1.3 Case

<sup>&</sup>lt;sup>5</sup>Matthew S. Dryer, "Coding of Nominal Plurality," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), https://wals.info/chapter/33.

<sup>&</sup>lt;sup>6</sup>Martin Haspelmath, "Occurrence of Nominal Plurality," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), https://wals.info/chapter/34.

<sup>&</sup>lt;sup>7</sup>Michael Daniel and Edith Moravcsik, "The Associative Plural," in *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath (Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013), https://wals.info/chapter/36.

# Compounding

How does compounding work?

### **Time and Measurement**

How to tell time and measure things.

## Derivation

How do you make new words?

## Syntax

How do words go together?

## Discourse

How does conversation work?

### **Tavonic Reference Grammar**

Here is a reference grammar for Tavonic.

### Part II

Tavonic Family: Alnuric

### History and Ethnography

This chapter will present a brief history of the Alnuric language, followed by a short description of its ethnolinguistic context.

#### 11.1 Brief History

Here will be a brief historical description of the Alnureth.

#### 11.2 Ethnography

#### 11.2.1 Demonyms and Language Names

For hundreds of years, the empire ruled in the southern region of Ardusa. The Tavonic word *unner* /un'ner/ 'empire' evolved into the Alnuric word *alnur* /al'nur/. *Alnurek* /al.nu'rek/ 'Alnuric' takes its name from this word. Meanwhile, the Redodhic name for the empire is *nonar* /no'nar/, and its name for the Alnuric language is *Nonrik* /non'rik/. Similarly, the Alnuric and Redodhic names for the Alnuric people are *Alnureh* /al.nu'reh/ and *Nonrih* /non'rih/ respectively.

#### 11.2.2 Ethnology

Here will be a brief ethnological description of the Alnureth.

#### 11.2.3 Demography

Here will be a brief demographical description of the Alnureth.

# Phonology

# Morphological Typology

# **Grammatical Categories**

# Compounding

## **Time and Measurement**

## Derivation

## Syntax

## Discourse

### Alnuric Reference Grammar

Here is a reference grammar for Alnuric.

### Part III

Tavonic Family: Redodhic

### History and Ethnography

This chapter will present a brief history of the Redodhic language, followed by a short description of its ethnolinguistic context.

#### 21.1 Brief History

Here will be a brief historical description of the Redodhith.

#### 21.2 Ethnography

#### 21.2.1 Demonyms and Language Names

In the north, the alliance resisted the empire's expansion. The Tavonic word *aroltutaþ* /aˌrol.tuˈtaθ/ signifies 'alliance', however the alliance instead used the simpler form *arutaþ* /a.ruˈtaθ/ 'standers' to signify the alliance of those kingdoms standing against the empire. *Arutaþ* evolved into the Redodhic word *rejiþ* /reˈd͡ʒiθ/, and *Redoðik* /re.doˈðik/ 'Redodhic' takes its name from this word. The Alnuric name for the alliance is *eradeþ* /e.raˈdeθ/, and its name for the Redodhic language is *Eratþek* /e.ratˈθek/. Similarly, the Redodhic and Alnuric names for the Redodhic people are *Redoðiþ* /re.doˈðiθ/ and *Eratþeþ* /e.ratˈθeθ/ respectively.

#### 21.2.2 Ethnology

Here will be a brief ethnological description of the Redodhith.

#### 21.2.3 Demography

Here will be a brief demographical description of the Redodhith.

# Phonology

# Morphological Typology

# **Grammatical Categories**

# Compounding

## **Time and Measurement**

## Derivation

## Syntax

## Discourse

### Redodhic Reference Grammar

Here is a reference grammar for Redodhic.

#### Part IV

Kalaakan Family: Kalaakan

# History and Ethnography

## Phonology

## Morphological Typology

# **Grammatical Categories**

# Compounding

### **Time and Measurement**

### Derivation

### Syntax

### Discourse

#### Kalaakan Reference Grammar

#### Part V

Kalaakan Family: Elvish

## History and Ethnography

## Phonology

# Morphological Typology

# **Grammatical Categories**

# Compounding

### **Time and Measurement**

### Derivation

## Syntax

### Discourse

### Elvish Reference Grammar

#### Part VI

Kalaakan Family: Dwarvish

# History and Ethnography

## Phonology

## Morphological Typology

# **Grammatical Categories**

# Compounding

### **Time and Measurement**

### Derivation

### Syntax

### Discourse

#### **Dwarvish Reference Grammar**

#### Part VII

Kalaakan Family: Orcish

## History and Ethnography

## Phonology

## Morphological Typology

# **Grammatical Categories**

# Compounding

#### **Time and Measurement**

#### Derivation

## Syntax

#### Discourse

#### Orcish Reference Grammar

#### Part VIII

Kunmian Family: Kunmian

## History and Ethnography

## Phonology

## Morphological Typology

# **Grammatical Categories**

# Compounding

#### **Time and Measurement**

## Derivation

## Syntax

#### Discourse

#### Kunmian Reference Grammar

#### Part IX

Kunmian Family: Gnomish

## History and Ethnography

## Phonology

## Morphological Typology

# **Grammatical Categories**

# Compounding

#### **Time and Measurement**

#### Derivation

## Syntax

#### Discourse

#### **Gnomish Reference Grammar**

# Part X Appendices

#### **Conceptual Metaphors**

What metaphors do the vocabulary convey?

Language is a tool. I speak *with* or *using* Tandi, rather than just speaking Tandi.

В

## Kinship

#### Names

 $\Box$ 

## Examples

## Vocabulary

#### Bibliography

- Annis, William S. "A Conlanger's Thesaurus." Fiat Lingua. September 1, 2014. Accessed September 8, 2018. http://fiatlingua.org/2014/09/.
- Baerman, Matthew, and Dunstan Brown. "Case Syncretism." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/28.
- Becker, Carsten. "A Grammar of Ayeri: Documenting a Fictional Language." Accessed November 25, 2018. https://github.com/carbeck/ayerigrammar.
- Bickel, Balthasar, and Johanna Nichols. "Exponence of Selected Inflectional Formatives." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/21.
- ———. "Fusion of Selected Inflectional Formatives." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/20.
- ——. "Inflectional Morphology." In *Language Typology and Syntactic Description*, edited by Timothy Shopen. 2nd edition. Cambridge: Cambridge University Press, 2005.
- ——. "Inflectional Synthesis of the Verb." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/22.
- Corbett, Greville G. "Number of Genders." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/30.
- ———. "Sex-based and Non-sex-based Gender Systems." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. https://wals.info/chapter/31.
- ——. "Systems of Gender Assignment." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. https://wals.info/chapter/32.

- Daniel, Michael, and Edith Moravcsik. "The Associative Plural." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. https://wals.info/chapter/36.
- Dryer, Matthew S. "Coding of Nominal Plurality." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. https://wals.info/chapter/33.
- ——. "Prefixing vs. Suffixing in Inflectional Morphology." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/26.
- Haspelmath, Martin. "Occurrence of Nominal Plurality." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. https://wals.info/chapter/34.
- Maddieson, Ian. "Consonant Inventories." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/1.
- ——. "Consonant-Vowel Ratio." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/3.
- ———. "Syllable Structure." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/12.
- ——. "Vowel Quality Inventories." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/2.
- Nichols, Johanna, and Balthasar Bickel. "Locus of Marking: Whole-language Typology." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/25.
- ———. "Possessive Classification." In *The World Atlas of Language Structures Online*, edited by Matthew S. Dryer and Martin Haspelmath. Leipzig: Max Planck Institute for Evolutionary Anthropology, 2013. http://wals.info/chapter/59.
- Payne, Thomas E. *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge, United Kingdom: Cambridge University Press, 2006. ISBN: 0-521-58805-7. http://www.cambridge.org/vi/academic/subjects/languages-linguistics/grammar-and-syntax/describing-morphosyntax-guide-field-linguists.
- Pearson, Matt. "The Okuna Reference Grammar." Accessed September 8, 2018. http://pearson.conlang.org/.
- Peterson, David J. *The Art of Language Invention: From Horse-Lords to Dark Elves, the Words Behind World-Building.* New York, New York, United States of America: Penguin Books, 2015. ISBN: 978-0-14-312646-1. http://www.artoflanguageinvention.com/books/.

- Plank, Frans. "Split Morphology: how Agglutination and Flexion Mix." *Linguistic Typology* 3 (1999): 279–340.
- Rosenfelder, Mark. *Advanced Language Construction*. Chicago, Illinois, United States of America: Yonagu Books, 2012. ISBN: 978-1478267539. https://www.zompist.com/lck2.html.
- ——. *The Conlanger's Lexipedia*. Chicago, Illinois, United States of America: Yonagu Books, 2013. ISBN: 1493733001. https://www.zompist.com/lexipedia.html.
- ——. *The Language Construction Kit.* Chicago, Illinois, United States of America: Yonagu Books, 2010. ISBN: 978-0-9844700-0-6. https://www.zompist.com/lckbook.html.
- Spencer, Andrew, and Ana Luís. "The Canonical Clitic." Chap. 6 in *Canonical Morphology and Syntax*, by Dunstan Brown, Marina Chumakina, and Greville G. Corbett, 123–150. 2012. ISBN: 9780199604326, accessed November 25, 2018. doi:10.1093/acprof:0s0/9780199604326.001.0001. https://www.academia.edu/4379177/The\_canonical\_clitic\_With\_Ana\_Lu%C3%ADs\_.
- Zwicky, Arnold M. "Clitics and Particles." *Language* 61, no. 2 (1985): 286–290. Accessed November 25, 2018. http://babel.ucsc.edu/-hank/mrg.readings/zwicky1985.pdf.
- Zwicky, Arnold M., and Geoffrey K. Pullum. "Cliticization vs. Inflection: English N'T." *Language* 59, no. 3 (1983): 503–505. Accessed November 25, 2018. https://web.stanford.edu/~zwicky/ZPCliticsInfl.pdf.

#### Index

```
allophony, 4, 5
consonants
    allophones, see allophony
    gemination, 4
    inventory, 5
    romanization, 6
morphological typology, 11-16
    exponence, 13-14
    flexivity, 14-16
    fusion, 12–13
    locus of marking, 21-23
    processes, 17-20
      cliticization, 18-20
      suffixation, 17–18
    synthesis, 16
vowels
    inventory, 7
```